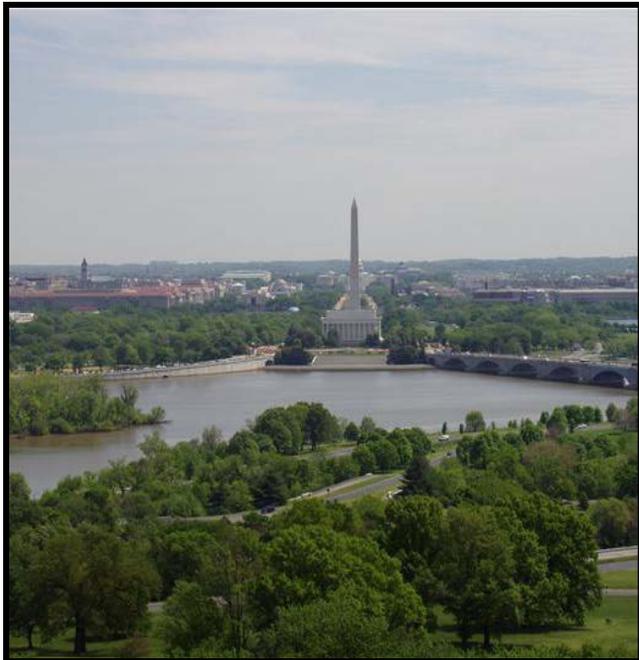


Sustainable
Water Resources Roundtable
At the Top of the Town

John Wells, SWRR Co-Chair

November 20, 2013

Sustainable Water Resources Roundtable



A national collaboration of federal, state, local, corporate, non-profit and academic interests

A committee of the USGS Advisory Committee on Water Information

Our Mission

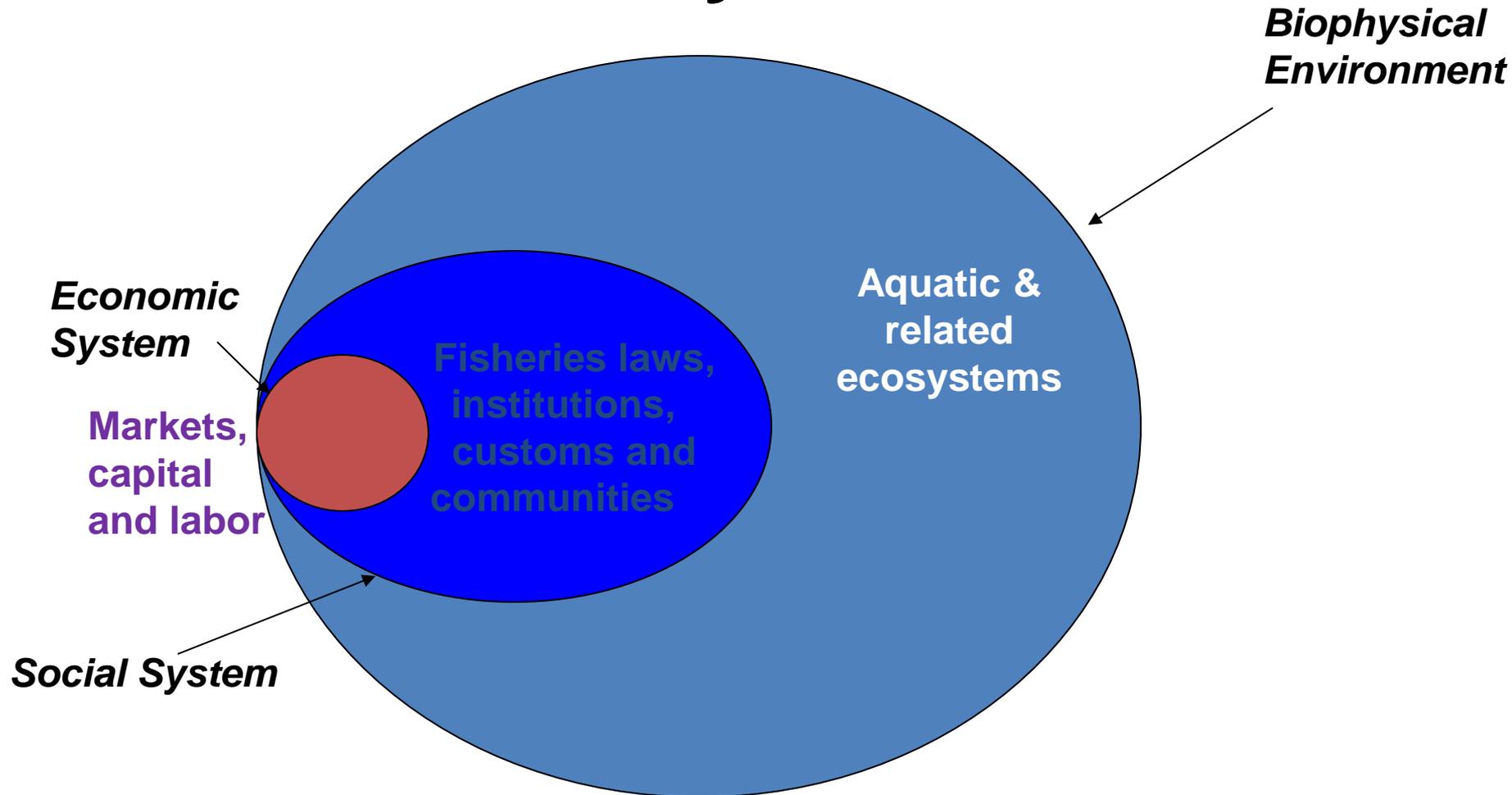
To promote sustainability of the nation's resources through ...

- Evaluation of information
- Development & use of indicators
- Targeting of research
- Engagement of people & partners

Outreach

- 700 participants from federal, state and local governments; corporations; nonprofits and academia
- Meetings in California; Colorado; Florida; Maryland; Michigan; Minnesota; Virginia; Washington, D.C.
- Web site <http://acwi.gov/swrr/index.html>
- 2005 Preliminary Report
http://acwi.gov/swrr/Rpt_Pubs/prelim_rpt/index.html
- 2010 SWRR Report
http://acwi.gov/swrr/Rpt_Pubs/SWRRReportMarch2010.pdf

Essential Relationships of Sustainability with Fisheries

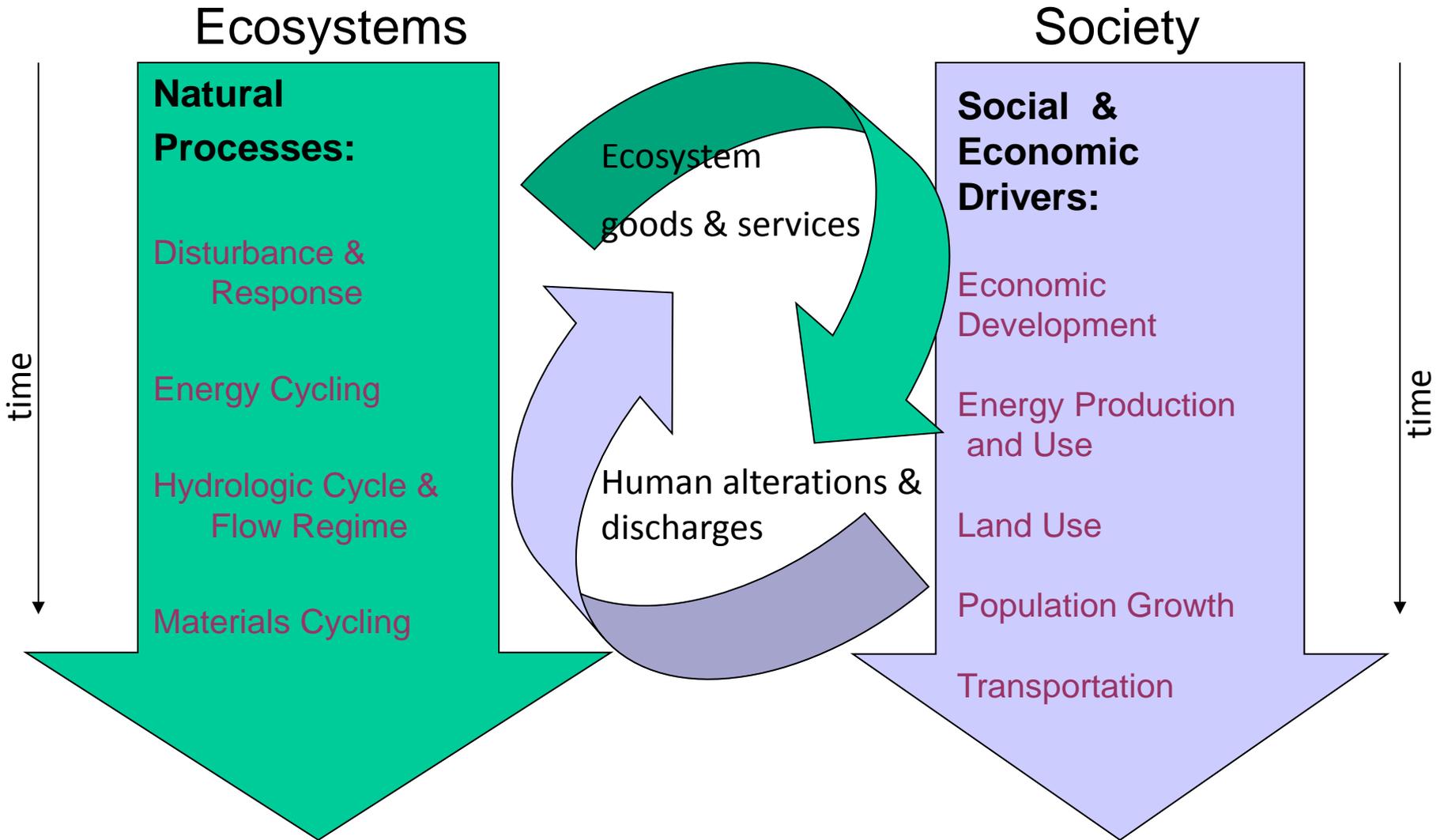


Capital and System Capacities

- **Capital is the capacity to produce value over time**
- **Environmental, social and economic systems produce value through flows of services, experiences, or goods that meet human and ecosystem needs over time**
- **We achieve sustainability by maintaining capital to meet needs**



Ecosystem Processes & Societal Drivers



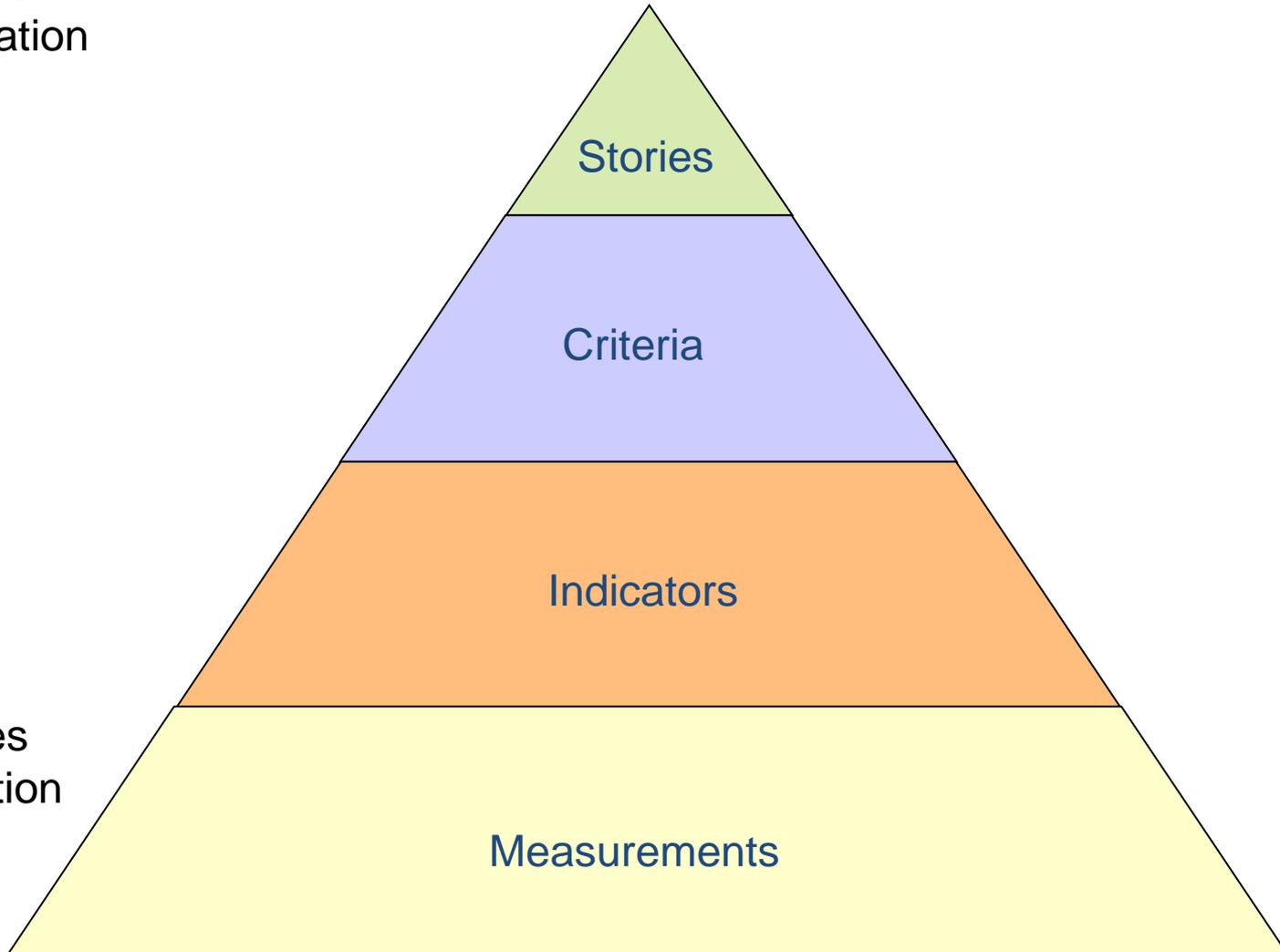


Information Pyramid

Fewer Pieces
Of Information



More Pieces
Of Information



Indicators

Measures that present trends information relevant to water sustainability in a readily understandable way



California Water Plan

Blueprint for Integrated Water Management & Sustainability



Army Water Security Observations

- Water management largely compliance-driven
- Less attention directed outward to sustainability of regionally shared water sources
- Long-term water projections currently not factored early into stationing decisions
- Chronic funding constraints means attention to Army-owned and Army-operated infrastructure tends to be reactive
- Long-term investment a challenge

Army Net Zero ...

- ENERGY Installation produces as much energy on site as it uses, over the course of a year
- WATER Installation does not deplete ground water and surface water resources in quantity or quality
- WASTE Installation converts waste streams to resource values with zero solid waste to landfill
- INSTALLATION captures and commercializes the resource value and/or enhances the ecological productivity of land, water and air

Water Sustainability at EPA

- Urban waters and sustainable community pilots
- Healthy Watersheds Initiative
- Climate-ready estuaries
- Effective utility management
- Green Infrastructure
- Value of water and ecosystem services
- Modeling climate impacts and adaptation options
- Emerging approaches:
 - Water sustainability indicators
 - Lifecycle costing



Enhancing Watershed Stewardship at the U.S. Forest Service

- How does climate and land use change shift water distribution?
- Likely consequences of these changes to plants, animals, and rural and urban communities?
- Scenarios for future forest disturbance regimes and aquatic ecosystems?
- Best metrics for measuring watershed condition?
- **Goal:** To facilitate watershed-based partnerships that foster conservation and citizen stewardship



International Water Stewardship

- The Alliance for Water Stewardship's *International Water Stewardship Standard* – Ed Pinero, Chief Sustainability Officer, Veolia Water North America
- To support water users in taking appropriate



Water Sustainability in Florida

- Wakulla Spring
- Water quality, water use and land use
- Climate change and sea level rise
- The Everglades
- Water Choices



Next Steps for the SWRR

- Continue roundtable outreach
 - Build regional connections
 - Add new private, nonprofit & public sector partners
- Assist agencies in developing programs and in describing the need for programs to collect indicator information
- Develop the SWRR ideas package



SWRR Ideas

- A handbook for sustainable watershed management
- A sustainable watershed index generator
- A framework for indicators in any watershed at any scale by any organization
- An evaluation of water footprint tools to help organizations understand water sustainability
- A web-based inventory of water sustainability indicators to share the best ways to grasp water trends

Contact Information

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